

Incorporating Landscape Principles into Land Use Plans

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The Washington state Department of Ecology has developed guidance to assist local governments in the application of landscape principles to planning and regulatory activities in order to develop a comprehensive framework for protecting environmental processes and functions. A landscape approach can be used to determine whether environmental processes have been altered, identify the mechanism and geographic area of process alteration and determine compatible future land use patterns and development standards and viable restoration opportunities. Whatcom County staff is currently in the process of incorporating these “landscape principles” into their updated Shoreline Management Plan and Critical Areas Ordinance. This paper will illustrate how the County applied Ecology’s landscape guidance during this planning effort and describe the results. Ecology’s landscape approach relies on existing environmental data and land use information such as surficial geology and geologic hazards, soil types, topography, land cover and land use, water quality and quantity, and mapping of critical habitats. It first develops a general model of the key environmental processes and their relationship to habitat areas and then applies specific indicators, such as land use, land cover, population density, channelization and ditching, to qualify the degree of alteration to these processes. By comparing the model of environmental conditions to the location and number of alterations, protection and restoration measures can be identified.